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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/624,300	07/22/2003	Stephen T. Staphanos	R22.12-0032	7799

7590 06/22/2004

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EXAMINER

FRANK, RODNEY T

ART UNIT	PAPER NUMBER
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2856

DATE MAILED: 06/22/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/624,300	Applicant(s) STAPHANOS ET AL.	
	Examiner Rodney T. Frank	Art Unit 2856	<i>Am</i>

-- The MAILING DATE of this communication appears on the cover sheet with the corresponding address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>12/15/03 & 2/2/04</u> . | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Lucero (U.S. Patent Number 4,883,505). Lucero discloses a method and device for continuously removing and concentrating specific molecules or substances from a gas stream and depositing such molecules or substances in a liquid film stream in a controlled and quantitative fashion. The device includes a hollow tetrafluoroethylene tube or a hollow tube having an inner surface coating of tetrafluoroethylene. The inner surface of the tube is etched by means of a chemical etching agent. An inlet/injector is attached to the outer circumference or inlet, circumferential face of the tube. The inlet/injector has liquid dispersion ports uniformly distributed around the circumference of the processor tube whereby a surfactant containing liquid may be uniformly dispersed from the inlet/injector onto the inner wall of the processor tube where it may flow, in a thin film manner, from the inlet of the tube to the outlet of the tube. The inlet/injector also has a gas injection port whereby a gas containing the molecules or substances sought to be removed and concentrated can simultaneously be injected into the top hollow portion of the tube. An outlet cap is attached to the outer circumference or outlet circumferential face of the tube. The outlet cap has a liquid collection well with a port or other means whereby the liquid flowing down the inner wall of the tube can be collected and transported to an analyzer. The outlet cap also has a gas port whereby

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the sample gas undergoing analysis can be removed from the tube and vented, treated or otherwise disposed of (Please see the abstract).

3. In reference to claim 1, Lucero discloses, and illustrates in reference to figures 1 and 3, a Continuous Emission Monitoring System for fossil fuel based generators, the system comprising: an analyzer adapted receive a sample flow and provide an output indicative at least one constituent the sample flow; a sample handling system coupleable to an emission source (17) and adapted to extract an emission sample from the sample source and provide the extracted emission sample to the sample analyzer; and wherein the sample handling system is embodied within a single enclosure (see specifically figure 1 for the single enclosure). The claimed device is described in detail beginning in column 6 line 18 and concluding in column 7 with line 6.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 2 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lucero.

6. With respect to claim 2, Figure 1 shows a single enclosure that has two visible compartments/sections. Claims 4 -6 discloses the use of different temperatures in different sections of the device.

With respect to claim 5, the use of polytetrafluoroethylene tubing is not specifically disclosed, but this device uses tetrafluoroethylene tubing, which is considered a functional equivalent to the polytetrafluoroethylene tubing.

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7. Claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Navarre (U.S. Patent Number 4,578,986). Navarre discloses a system for the analysis of gas samples from a dry and dusty environment, such as the interior of a lime kiln, includes a probe which extends relatively far into the kiln, to avoid the adverse effect on the measurements of extraneous, i.e., "tramp", air which may leak into the kiln. A sample of the gas is drawn through an isolation tube, which extends from the probe chamber in a direction for sample flow opposite to the flow of gases in the kiln. The sample is passed through a filter, within the probe chamber; pumped to a conditioning system, in which the sample gas is cleaned and cooled; and then pumped to gas analysis cells for the analysis of the individual gases (Please see the abstract).

With respect to claim 1, Navarre discloses and illustrates in figure 1 a Continuous Emission Monitoring System for fossil fuel based generators, the system comprising: an analyzer (15a) adapted receive a sample flow and provide an output indicative at least one constituent the sample flow; a sample handling system coupleable to an emission source (2) and adapted to extract an emission sample from the sample source and provide the extracted emission sample to the sample analyzer; and wherein the sample handling system is embodied within a single enclosure. Though the single enclosure is not specifically disclosed, the layout and connections of the device appear to be unitary in nature and therefore the single enclosure is presumed.

With respect to claim 2, column 2 lines 29-31 disclose a "probe chamber". Since the device has a probe chamber and then a conditioning system with a scrubber and a cooler, then there appears to be at least two chambers.

With respect to claim 3, column 2 lines 10-34 disclose that the initial gas sample taken into the probe (the first compartment) is hot and the sample is passed to a cooler (19). This would indicate that a first compartment is at an elevated temperature and a second compartment has a

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cooler. The thermoelectric cooler is not specifically disclosed, but is considered obvious to one of ordinary skill in the art to use a specific type of cooling means as needed or desired.

With respect to claim 4, pipe (14) leading to the scrubber and then the cooler is not disclosed to be heated, nor is the tube taking the sample from the scrubber to the cooler disclosed to be heated.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The examiner has cited other references that were not used for the rejection, but are deemed as relevant to the general state of the art of the present invention.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rodney T. Frank whose telephone number is (571) 272-2193. The examiner can normally be reached on M-F 9am -5:30p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hezron E. Williams can be reached on (571) 272-2208. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

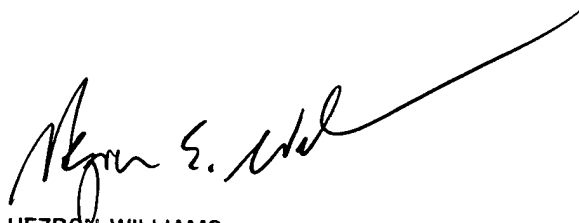
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RTF

June 18, 2004

A handwritten signature in black ink, appearing to read "Hezron E. Williams", with a long, sweeping horizontal line extending to the right.

HEZRON WILLIAMS
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800